

Claims

1. A track assembly for use in a utility cart, the track assembly comprising:

a top tandem arm for pivotal operable connection to a frame such that said top

tandem arm will pivot in a substantially vertical plane;

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a bottom tandem arm having a front portion, a rear portion, a top portion, and a

bottom portion, said top portion of said bottom tandem arm being

pivotaly connected to said top tandem arm,

a front tandem arm idler wheel operably connected to said front portion of said

bottom tandem arm;

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a rear tandem arm idler wheel operably connected to said rear portion of said

bottom tandem arm; and

a belt in engagement with said tandem arm idler wheels.

2. A utility cart for transporting agricultural implements, said cart comprising:

a pair of elongated rails suitable for supporting agricultural implements, said rails

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being substantially parallel to each other;

a transverse rear axle rigidly mounted to said rails;

a first rear top tandem arm and a second rear top tandem arm pivotally mounted at

opposite ends of said rear axle such that said top rear tandem arms can

pivot in a plane substantially parallel to said elongated rails, each of said

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tandem arms having a front portion and a rear portion;

a first rear bottom tandem arm pivotally mounted to said front portion of said first

rear top tandem arm such that said first rear bottom tandem arm can pivot

longitudinally with respect to said first rear top tandem arm, said first rear
bottom tandem arm having a front portion and a rear portion;
a second rear bottom tandem arm pivotally mounted to said front portion of said
second rear top tandem arm such that said second rear bottom tandem arm
5 can pivot longitudinally with respect to said second rear top tandem arm,
said second rear bottom tandem arm having a front portion and a rear
portion;
rear tandem arm wheels attached to said front and rear portions of said first and
second rear bottom tandem arms;
10 a first rear idler wheel rotatably mounted to said rear portion of said first rear top
tandem arm for rotation in a plane substantially parallel to said rails;
a second rear idler wheel rotatably mounted to said rear portion of said second
rear top tandem arm for rotation in a plane substantially parallel to said
rails;
15 a hitching frame for connection to a towing vehicle, said hitching frame being
pivotally connected to a front portion of said elongated rails;
a transverse front axle rigidly mounted to said hitching frame;
a first front top tandem arm and a second front top tandem arm pivotally mounted
at opposite ends of said front axle such that said top front tandem arms can
20 pivot in a plane substantially parallel to said elongated rails, each of said
front tandem arms having a front portion and a rear portion;
a first front bottom tandem arm pivotally mounted to said rear portion of said first
front top tandem arm such that said first front bottom tandem arm can

pivot longitudinally with respect to said first front top tandem arm, said
first front bottom tandem arm having a front portion and a rear portion;
a first front idler wheel rotatably mounted to said front portion of said first front
top tandem arm for rotation in a plane substantially parallel to said rails;
5 a second front idler wheel rotatably mounted to said front portion of said second
front top tandem arm for rotation in a plane substantially parallel to said
rails;

front tandem arm wheels attached to said front and rear portions of said first and
second front bottom tandem arms;

10 a first tension bar of adjustable length spanning between said first front top
tandem arm and said first rear top tandem arm;
a second tension bar of adjustable length spanning between said second front top
tandem arm and said second rear top tandem arm;

15 a first continuous belt looped around said first front and first rear idler wheels,
said first continuous belt having a ground engaging surface for supporting
the weight of the utility cart and an interior surface engaging said front
and rear tandem arm idler wheels; and

20 a second continuous belt looped around said second front and second rear idler
wheels, said second continuous belt having a ground engaging surface for
supporting the weight of the utility cart and an interior surface engaging
said front and rear tandem arm idler wheels.

3. An assembly for use in a foldable stackable frame for mounting agricultural
implements, the assembly comprising:

a main frame for operable attachment to a transportation vehicle;
a wing operably attached to said main frame, said wing adjustable between a
working position wherein said wing extends transversely to a longitudinal
axis of said transportation vehicle when said main frame is attached to said
5 transportation vehicle and a folded position wherein said wing is generally
parallel to said longitudinal axis of said transportation vehicle when said
main frame is attached to said transportation vehicle, said wing being
adapted to have implements attached;

a stacking arm pivotally connected to said wing and said main frame, said
10 stacking arm being adjustable between a lowered position and a stacked
position; and

a stacking cylinder connected between said main frame and said stacking arm to
move said stacking arm and wing into a transport position wherein said
stacking arm is in said stacked position and said wing is in said folded
15 position.

4. A foldable stackable frame for mounting agricultural implements, the foldable
stackable frame comprising:

a mounting frame having a forward end and a rearward end;

a lift frame having a front portion and a rear portion, said front portion of said lift
20 frame being pivotally mounted proximate to said forward end of said
mounting frame;

a lift cylinder mounted between said mounting frame and said lift frame for
raising and lowering said rear portion of said lift frame with respect to said
rearward end of said mounting frame;

a front support frame mounted to said front portion of said lift frame;

5 a rear support frame mounted to said rear portion of said lift frame;

a rear stacking arm having a first end and a second end, said first end of said rear
stacking arm being pivotally mounted to said rear support frame for
pivoting in a stacking plane;

a front stacking arm having a first end and a second end, said first end of said
10 front stacking arm being pivotally mounted to said front support frame for
pivoting in a plane parallel to said stacking plane;

a front stacking cylinder mounted operably connected between said front support
frame and said front stacking arm to control pivoting of said front stacking
arm in said stacking plane;

15 a rear stacking cylinder mounted operably connected between said rear support
frame and said rear stacking arm to control pivoting of said rear stacking
arm in said stacking plane;

an implement wing suitable for supporting implements operably connected to said
rear stacking arm such that said implement wing is pivotal with respect to
20 said rear stacking arm in a folding plane that is generally perpendicular to
said stacking plane, said implement wing being adjustable between a
working position wherein said implement wing is generally perpendicular
to a longitudinal axis of said mounting frame and a folded position

wherein said implement wing is generally parallel to said longitudinal axis
of said mounting frame;

a fold cylinder operably connected between said implement wing and said rear
stacking arm to control pivoting of said implement wing between said
5 working position and said folded position; and
said stacking cylinders being able to move said implement wings into an elevated
transport position wherein said implement wings are elevated above said
mounting frame while in said folded position.

5. A self-tucking wheel apparatus for use with agricultural booms, the agricultural
10 booms being of the type adjustable between a working position and a folded transport position,
the wheel apparatus providing support for an outboard portion of the boom when the boom is in
the working position, the wheel apparatus comprising:

a main bracket for attachment to an agricultural boom, said bracket having a
leadward portion and a trailward portion;

15 a trailward arm pivotally attached to said trailward portion of said main bracket
such that said trailward arm can pivot in a substantially vertical plane
when said agricultural boom is in an extended working position;

a trailward wheel operably connected to said trailward arm;

a swing bracket pivotally attached to said leadward portion of said main bracket;

20 such that said swing bracket can pivot in a substantially vertical plane
when said agricultural boom is in said extended working position;

a leadward wheel operably connected to said swing bracket by a parallel linkage,
said parallel linkage extending rearwardly from said swing bracket;

a wheel tucking lever pivotally attached to said main bracket for pivotal

movement in a substantially vertical plane;

a trailward cylinder connected between said wheel tucking lever and said

trailward arm for moving said trailward arm between an extended working

5 position and a tucked transport position;

a link between said wheel tucking lever and said swing bracket

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